Fatty acid metabolism, impaired glucose tolerance and the effects of lifestyle

Stellingen

behorende bij het proefschrift

'Fatty acid metabolism, impaired glucose tolerance and the effects of lifestyle'

van Eva Corpeleijn

The concept that diabetes mellitus is a syndrome comprised of a variety of impairments in different organs all leading to hyperglycemia and insulin resistance emphasises the need for organ-specific research in humans *in vivo*.

De hoge prevalentie van een verstoord glucose metabolisme in mannen en vrouwen met een verhoogd risico op diabetes mellitus type 2 rechtvaardigt de enorme inspanningen van grootscheepse campagnes voor de opsporing en preventie van diabetes mellitus type 2.
(The high prevalence of disturbances in glucose homeostasis in men and women at risk for diabetes mellitus type 2 justifies the huge efforts of campaigns to trace and prevent diabetes cases.)

The impaired 'metabolic flexibility' of substrate oxidation in skeletal muscle of men with impaired glucose tolerance is a marker for the loss of capacity to regulate postprandial substrate metabolism.
(this thesis)

The release of interleukin-6 by skeletal muscle of subjects with impaired glucose tolerance indicates that skeletal muscle acts as an endocrine/paracrine organ by secreting 'myokines'.
(this thesis)

The acute insulin-mediated increase in CD36 protein in skeletal muscle indicates that the regulation of free fatty acid uptake occurs partly at the level of skeletal muscle itself.
(this thesis)

Once the prediabetic state has developed, differences in skeletal muscle substrate oxidation between obese normal glucose tolerant and obese impaired glucose tolerant men cannot be explained by differences in glucose or free fatty acid uptake from plasma.
(this thesis)

We should rephrase the term 'Diabetes mellitus type 2' into 'Diabetes lipidus'.

No one knows whether any group of 100 diabetic patients consists of ten groups of ten patients with a different pathogenesis for each group; or whether 90 patients have the same pathogenesis, while the other 10 have a different pathogenesis form one another.
(Hockaday et al., Diabetologia 2003, 35:595-601)

Over de relatie tussen voeding en chronische ziekten: "(...) er gebeurt te weinig; als dit zo doorgaat stevenen we af op een wereldwijde ramp met ziektekosten die niet of nauwelijks nog te dragen zijn. Preventie is de enige optie om dit binnen de perken te houden."
(Dr. Beaglehole, 18th congress of the International Union of Nutritional Sciences, Urban, South Africa).

In ons denken speelt zich meer af dan wij verwoorden kunnen.
(Free translation: The landscape of our thoughts is more complex than we can describe.)
(aangepast van M.C.Esher)

'n Achterhoeks accent is heul Normaal.

Maastricht, November 2006